285
water bottles are first coated with soap-weed paste colored red, and then with pinon gum to make them water tight.

The real artistry of Havasupai basketry is seen in the coiled trays and bowls, made of twigs of cottonwood or the three-leaved sumac. In shape they vary from round or oval plaques, nearly flat but with slightly upturned margins, to baskets or bowls of cylindrical proportions. The material is prepared at leisure and made into bundles and stored. The bark is scraped from the twigs, the wood split and scraped to uniform width. When desired for use, the materials are soaked in water to make them flexible. The sewing is on a three rod foundation. The ends of three twigs are tied in a knot. One end of the sewing element is pulled under one rod near the knot. The rods are started in a spiral and the binder stitched around them into the middle of the knot. The stitches following those of the first coil are sewed into the knot also. The coils are so arranged that two rods lie along the completed coil with the third on top and between them. The stitch in the succeeding coils is meant to pass under the third rod, but in most cases it pierces this rod which the awl splits. Stitches are evenly spaced to pass between those of the previous coil, not to pierce them. After two coils are in place the end of the rods that protrude at the center are clipped off. Sewing is always from right to left; the free ends of the rods are held in place with the left hand while the right plies the awl. The sewing element is brought over the rod toward the worker and through the coil away from her.

There are two or three methods of finishing the rim of coiled baskets. Usually they are finished by cutting off three rods successively so that the coils will taper to an end. Some baskets are finished with a diagonal over and over stitch with two strands.

531 Simple geometrical figures, animals, and banded designs are made in the black outer side using the outer layer of the seed pod of devil's claw. Most baskets are of white background with black decorations, however, the reverse is sometimes found with baskets of black devil's claw background and white designs.

534 The Havasupai cradle board is an oval frame across which small twigs are laid except at the rounded ends. The frame is made of green branches which are bent, tied and buried in damp soil to set in shape. The sticks that are laid across the frame are bound to it by a long strip of buckskin which passes once diagonally over the end of each cross stick. A piece of canvas or buckskin is laid along each side of the frame to cover the wrapping and is held in place by tie loops of buckskin, which are always four in number. Some cradles have carrying straps or a woven Hopi or Navaho belt may be used for the carrying strap, fastened to the frame about one-third of the distance from the top. A hoop of wicker is tied to the frame in the open space at the top and to the upper cross sticks. Two stay straps extend from the center of the upper end of the frame to two points on the hoop. A blanket is usually spread over the hoop to protect the baby's face from the sun and wind and to save him from injury should the cradle board fall.

SOCIAL ORGANIZATIONS AND CUSTOMS

594 The Havasupai family in our sense is the social unit. There is no 614 *clan* or *gentes* system, nor are there any indications that they ever ex- 602 isted. Individuals recognise their affiliations with their immediate relatives only; there are no other particular social or ceremonial groups.

593 The family groups are loosely bound into large ones by blood ties. A group of sons reside in houses adjacent to the parent's home, together with the newly established families of the daughters of the house. The father and sons work their undivided fields with the assist-